The importance of multidisciplinary teamwork in stroke rehabilitation

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What to expect

- CLAHRC Implementation research
- Multidisciplinary team working
  – Early Supported Discharge
- MDT improvement programme
- In-hospital stroke rehabilitation – REVIHR study
Multidisciplinary interventions

Stroke - Act F.A.S.T

Organised inpatient (stroke unit) care for stroke (Review)

Stroke Unit Trialists’ Collaboration

Services for reducing duration of hospital care for acute stroke patients (Review)

Fearon P, Langhorne P; Early Supported Discharge Trialists
Implementation

Randomised controlled trial

THE COCHRANE COLLABORATION®

Not linear and not simple
CLAHRC research: not a spectator sport
Stroke Rehabilitation

• Multiple layers of complex interventions
• Clinical treatment (patient and therapist)
• Multidisciplinary team (co-delivery of the intervention)
• Healthcare system (organisations and care pathways)
• Number and variability of outcomes
MDT improvement programme

- Team effectiveness – Borrill et al 1999
- Knowledge-to-action – Graham et al 2006
- Multi-modal – Grimshaw et al 2006

Sentinel Stroke National Audit Programme (SSNAP)

Improvement programme
MDT Programme

- Develop and deliver an MDT improvement programme to:
  - support multidisciplinary working and team effectiveness within community teams (ESD and community stroke rehabilitation)
  - facilitate evidence based practice through education
- Gain additional understanding of multidisciplinary teams and context specific features that inform team interaction
- Address a lack of NHS teamwork training for multidisciplinary specialist teams
- The programme was delivered to nine community teams across the East Midlands
Underpinning research

Meta-analysis and systematic review (Langhorne et al 2005; Fearon et al 2012): clinical trials of ESD compared to usual care

Implementation study focused on ESD (CLAHRC)
- Consensus documents (Fisher et al 2011; 2013)
- Qualitative investigation of context (Chouliara et al 2013; Cobley et al 2013)
- Piloting of improvement activities with ESD teams to facilitate evidence base care
- Evaluation of ESD effectiveness in practice (Fisher et al 2015)

Multidisciplinary team improvement programme (Health Education East Mids)
- Nottinghamshire pilot

Roll-out of multidisciplinary team improvement programme (East Mids AHSN)
- East Midlands wide
Collaboration for Leadership in Applied Health Research and Care
East Midlands

Evidence core & service context

ESD core components
- MDT composition
- Stroke specialist
- Eligibility criteria
- Early & Responsive
- Intensive rehab

Base hospital-community
Geography: Urban-rural
Team culture
Organisational features
Politics, finance & resources
Characters and champions

Damschroder et al 2009. Improvement Science 4:50
Collaboration for Leadership in Applied Health Research and Care
East Midlands

IPO model

Team Effectiveness

Inputs
- Location
- Context
- Team-task
- Team Composition

Processes
- Clarity of objectives
- Decision making/Participation
- Communication
- Reflexivity

Outputs
- Clinical outcomes
- Innovation
- Cost effectiveness
- Psychological Mindfulness

Borrill 1999-The Effectiveness of Healthcare Teams in the National Health Service
Findings from focus groups

Team task - Commitment to an overall team purpose and remit helped focus the processes of service delivery; helped sustain stroke specificity.

Team Leadership and joint decision-making were important mechanisms for interdisciplinary team working and effective MDT meetings.

Team communication – Communication greatly valued in community based working; pitfalls of ‘agile’ working; importance of rota systems.

Location – pros and cons of community base; challenges with hospital in-reach; co-location with other community services; rural travel.

Receptivity to innovation – the adoption of new communication strategies (electronic timetabling), individual development (training, evidence based practice).
Team reflection and goal setting

- Teams received tailored reports and feedback about their teamwork, based on findings from the focus groups
- Included team effectiveness scores and recommendations
- IPO model provided a useful framework for organising issues identified in focus group sessions
- Teams benefitted from protected time together to reflect
- Set goals for improvement

 ✓ 100%: significantly apply the learning to their work
 ✓ 100%: facilitated communication and collaboration
Interim Summary: MDT programme

- Developed an MDT improvement programme designed to facilitate evidence based practice and team effectiveness
- West & Borrill’s IPO model useful in helping teams explore how they operate and identify goals for improvement
- Critical for researchers and teams themselves to understand the complexity of the context in which teams operate
- CLAHRC Programme adoption by East Midlands AHSN allowed roll-out across the East Midlands at pace and scale
The REVIHR study

**Research to Implement Evidence Based In-Hospital Rehabilitation (REVIHR)**

- Appropriately delivered, high intensity, specialist rehabilitation early post stroke leads to better functional outcomes for stroke patients
- Interdisciplinary working is a key component of organised stroke units

**REVIHR study conducted in four stroke units across the East Midlands**

- What care is received by stroke survivors in the stroke rehabilitation ward? (observational mapping, focus on activities of daily living, how much and by whom?)
- How is therapists time shared between therapeutic and non-therapeutic activities?
- Realist evaluation: what works for whom and in what circumstances?
- How can we facilitate provision of evidence based care?
Programme theories:

• “What works for whom in what circumstances?”

• Made up of multiple multilevel CMO patterns

  **Context:** Conditions in which programmes are introduced

  **Mechanisms:** How a programme brings about effects

  **Outcome:** Intended or unintended consequences of interventions
Facilitating improvements in local services

**Research findings**
- Uncover mechanisms driving stroke rehab practice
- Capture lessons learned from each site
- Feedback findings to each team
- Work in partnership with key stakeholders and local champions to develop and deliver improvement programmes

**Clinical practice**
Multidisciplinary team working is critical to the effective delivery of stroke rehabilitation in both hospital and community settings.

- It needs support! MDT improvement programme for community based stroke teams.
- West & Borrill’s team effectiveness literature and IPO model.
- Team reflection on their context allowed improvement goals to be identified and acted upon.
- CMO programme theories provide a robust framework to investigate delivery of in-hospital based stroke rehabilitation.
- Coming soon – REVIHR results and improvement programme.
- CLAHRC research: get involved to get impact.
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